

Remarks

The Rejection of Claims 1-27 under 35 U.S.C. §103(a)

The Examiner rejected Claims 1-27 under 35 U.S.C. §103(a) as obvious to one having ordinary skill in the art in view of U.S. Patent No. 5,535,052 (Jörgens) and U.S. Patent No. 4,350,417 (Freeman). Applicants respectfully traverse the rejection.

With regard to Claims 1, 2 and 4-9, the Examiner asserted that Jörgens discloses a shutter device for a microscope having means for monitoring the functional state of the shutter. Claim 1 of the present application for patent includes the following limitation:

means (3) for monitoring the functioning of the interruption device (1) being associated with the interruption device (1) wherein the means (3) are configured to monitor the interruption state generated by the interruption device (1).

As illustrated in Figures 1-8 of the present application, the means for monitoring (3) the functional state of the interruption device generally comprises a light source, which is operatively arranged to interact directly with the interruption device itself. Jörgens does not teach similar direct monitoring means and actually teaches indirect means for controlling the operational state of a shutter. Indeed, the invention disclosed by Jörgens is operatively arranged such that magnetic sensors are configured for monitoring the operational state of a reflecting mirror, which then signals a shutter. As a matter of fact, column 4, lines 46-57 of the Jörgens patent specifically states:

The position of the fully reflecting mirror (10) on the reflector slide (9) is monitored by the sensor. This sensor in this case consists of two magnets (21) that are received in two small bores in the reflector slide (9), and two probes (20) opposite the magnets, received on the guide of the reflector slide (9). If the magnets (21) and the probes (20) are

positioned opposite each other, the resulting signal triggers a shutter...Since only the switching position of the fully reflecting mirror is monitored by magnets 21...

Thus, it is seen that the invention disclosed by Jörgens is operatively arranged to monitor the positional state of the mirror and not the shutter.

Additionally, it should be appreciated that the Examiner's assertion that Jörgens teaches that, "sensors are provided on the pivot joint of the arm and are coupled to the shutter for interruption of the laser beam," at column 3, lines 37-45, is also flawed; column 5, lines 2-12 of the Jörgens patent states in part, "...a sensor (26, 27) is also provided here. The signals of the sensors (20,21) and (26,27) are connected together in the sense of a logical AND circuit, so that the laser beam path is only opened when both sensors indicate the safe state," yet Jörgens does not teach sensors 20, 21 or 26, 27 as being operatively arranged for directly monitoring the functional state of the interruption device. Indeed, coupling of the sensor signals via a logic AND circuit merely indicates that sensors (20,21) and (26,27) sense the position of the mirror.

Despite these differences, the Examiner baldy asserts on page 4 of paper No. 5 that, "it is implied herein that the use of a mirror coupled to a shutter, in accordance with Jörgens above is equivalent to the interruption device of Claim 1." Where separate elements of a reference are to be combined there must be some teaching, suggestion or motivation in the prior art to make the combination. In the present case, Jörgens contains no such teaching, suggestion or motivation to make the combination propounded by the Examiner. In fact, Jörgens specifically discloses a mirror and a shutter as comprising two separate elements and specifically names each respective element "mirror" and "shutter"; there is simply no reference to an "interruption device" comprising a mirror and a shutter. Hence, the motivation to make the combination suggested by

the Examiner does not emanate from the reference and is impermissible. Consequently, the combination is nonobvious and/or cannot be implied. Additionally, the mere fact that Jörgens refers to a "mirror" and a "shutter" as comprising separate elements and not a collective "interruption device" effectively supports the fact that the two elements were not intended to be combined. In essence, Jörgens teaches away from the combination propounded by the Examiner such that the combination is nonobvious and/or cannot be implied. Furthermore, assuming *arguendo* that the mirror and shutter of Jörgens comprises a generic interruption device, the generic interruption device of Jörgens and the "interruption device" of Applicant would be very different. As a matter of fact, the generic interruption device of Jörgens would require a mirror for proper operation; Applicants' interruption device does not require a mirror for proper operation. Hence, the generic interruption device created by the impermissible combination propounded by the Examiner would not even be equivalent to the interruption device described by Applicant. Hence, Applicants' interruption device is nonobvious and/or not implied in view of the teachings of Jörgens. Finally, the Examiner's statement that the combination is implied is nothing more than an application of impermissible hindsight reconstruction and/or impermissible activism on behalf of the Examiner to use that which the inventor taught against its teacher. Simply put, Jörgens contains no implicit or explicit disclosure and/or teach or suggest the combination propounded by the Examiner. Thus, the combination propounded by the Examiner does not emanate from Jörgens.

With regard to the rejection of Claims 3 and 10-27 in further view of Freeman, Freeman discloses an apparatus for controlling light intensity from an arc lamp. Neither Freeman nor

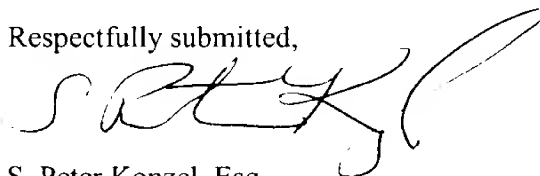
Jörgens disclose, teach, or suggest an interruption device comprising means (3) for monitoring the functioning of an interruption device or an opening (4) for monitoring the operational state of the interruption device as required by the above-identified claims. Additionally, neither Freeman nor Jörgens contains a teaching, suggestion or motivation to combine a shutter (5) with a means for directly monitoring the functional state of the shutter.

In summary, neither Freeman nor Jörgens disclose, teach or suggest an interruption device for a microscope comprising means for directly monitoring the operational state of the interruption device itself.

Conclusion

Applicant respectfully submits that all pending claims are in condition for allowance, which action is courteously requested.

Respectfully submitted,



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